



MIAMI-SOUTH FLORIDA

National Weather Service Forecast Office

<http://www.weather.gov/miami>

SOUTH FLORIDA WINTER 2014-2015 RECAP

Mostly Mild and Dry

South Florida enjoyed a mostly mild winter, with the average temperatures for the December-February period above the 30-year normal for the fourth consecutive winter. However, it wasn't as warm as the last three winters due in large part to two fairly extended periods of cool weather; one in early-mid December and another which encompassed all but the last week of February (Figure 1). The overall atmospheric pattern during December and January kept most of the cold air masses well to our north, while in February the pattern shifted to a stronger flow of northerly winds into our area resulting in cooler temperatures (Figures 3 and 4). Overall, December was 1 to 2 degrees above normal, January about 3 to 4 degrees above normal and February 2 to 4 degrees below normal.

Temperatures

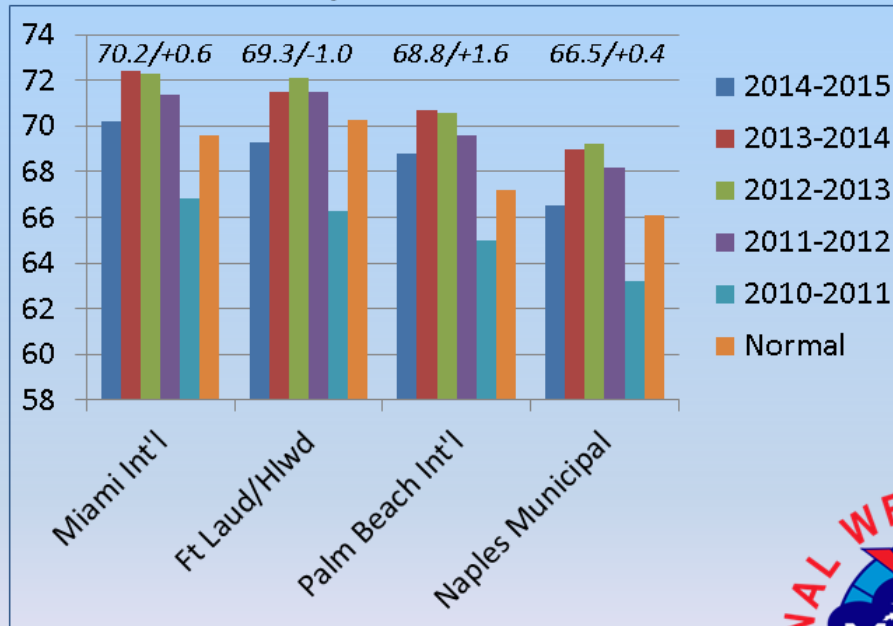
Here are average December 2014-February 2015 temperatures and departures from normal in degrees F and ranking for select locations:

Location (beginning of period of historical record)	Dec 2014-Feb 2015 Avg Temp	Departure From Normal (F)	Rank
Miami (1895)	70.2	+0.6	T-26th warmest
* Fort Lauderdale (1912)	69.3	-1.0	18 th warmest
West Palm Beach (1888)	68.8	+1.6	T-31 st warmest
Naples (1942)	66.5	+0.4	T-18 th warmest

** Period of record at Fort Lauderdale before 1999 includes data from the Dixie Water Plant which is a few miles inland from the current official site at the airport. Therefore, some slight discrepancies exist between the normal at FLL and the historical record.*

Winter 2014-2015 Average Temperatures (F)

Numbers in italics above the bars are the 2014-2015 average temperatures and departure from average for each site



Warmer than normal at each site. However, cooler than each of the past 3 winters

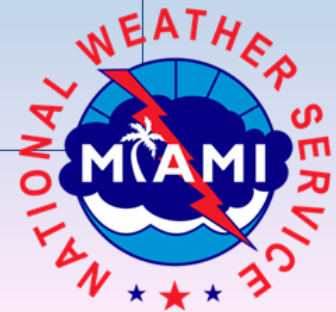


Figure 1: Winter 2014-2015 average temperatures and comparison to previous 4 winters.

The coldest weather of the winter season occurred on February 19 and 20 following the passage of a strong cold front of Arctic origin. Temperatures on the morning of February 20th dropped to at or below freezing over much of interior south Florida mainly west and south of Lake Okeechobee, with mid 30s to lower 40s over most of the remainder of the area. The coldest reading was 27 degrees at Ortona in southwestern Glades County. Frost was observed over these areas and even as far east and south as the Homestead area. Crop damage was relatively minor compared to past events, and temperatures recovered rapidly in the following days. No other freeze/frost events were noted this winter.

One way to determine the number of “cool” days is by adding up the number of days in which either the low temperatures dropped below 50 degrees or high temperatures failed to reach 70 degrees (Figure 2). At each of the four main climate sites (from the

table above), the number of sub-70 highs and sub-50 lows were below the 30-year normal, consistent with a mostly mild south Florida winter.

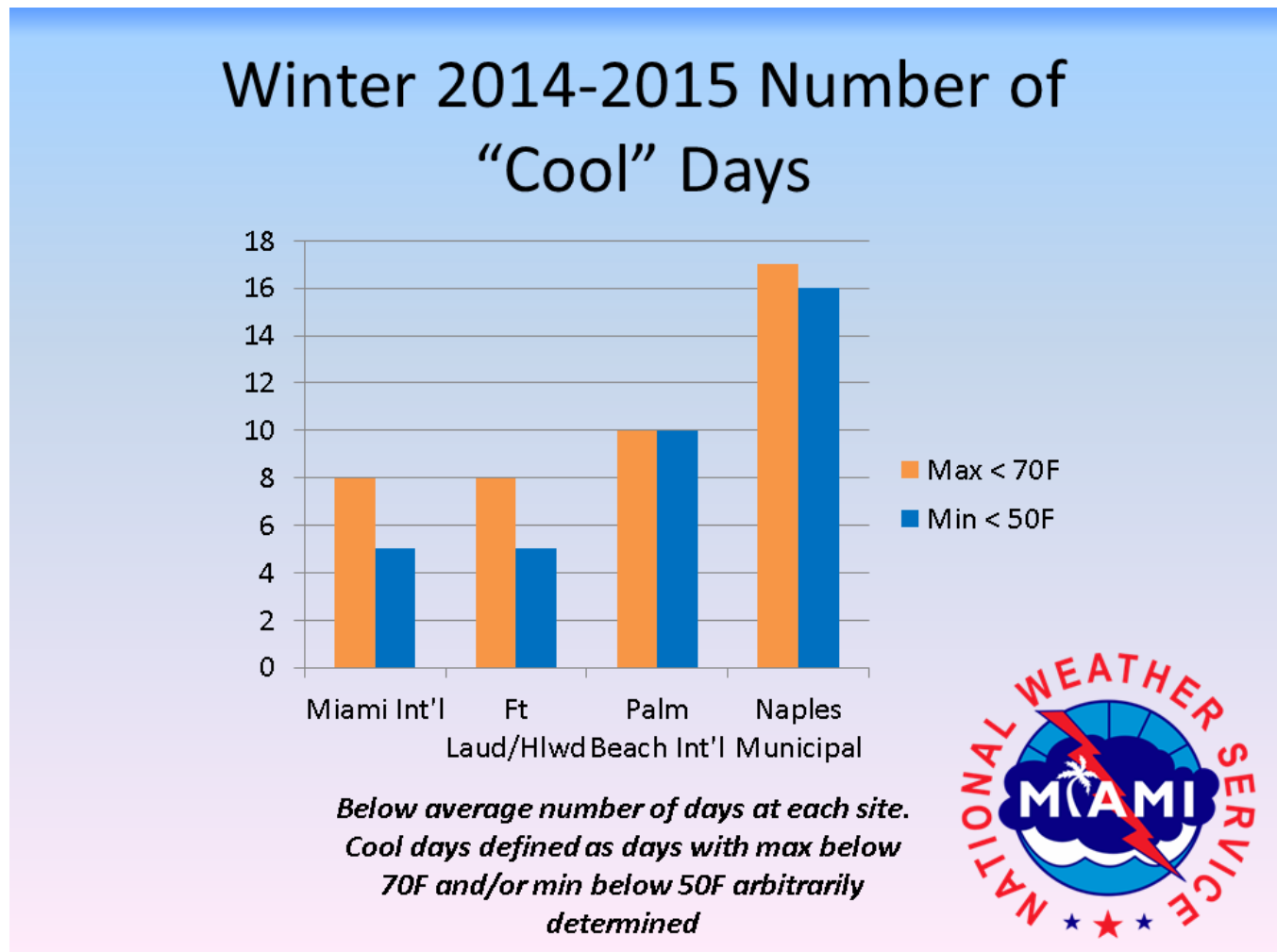


Figure 2: Number of “cool” days based on days of sub-70 highs and/or sub-50 degree lows.

The coldest and warmest temperatures of the winter season at the main climate sites were:

Miami International Airport: The lowest temperature recorded was 42 degrees on February 20th. The highest temperature was 87 degrees on February 26th. A total of five days below 50 degrees were observed, along with 37 days of 80 degrees or greater.

- Palm Beach International Airport: The lowest temperature recorded was 38 degrees on February 20th. The highest temperature recorded was 87 degrees on February 26th. A total of 10 days below 50 degrees were observed, along with 30 days of 80 degrees or greater.

- **Fort Lauderdale/Hollywood International Airport:** The lowest temperature recorded was 40 degrees on February 20th. The highest temperature was 84 degrees on February 24th and 26th. A total of five days below 50 degrees were observed, along with 27 days of 80 degrees or greater.

- **Naples Municipal Airport:** The lowest temperature recorded was 36 degrees on February 20th. The highest temperature was 86 degrees on February 28th. A total of 16 days below 50 degrees were observed, along with 31 days of 80 degrees or greater.

Precipitation

On average, south Florida received about 2 to 4 inches less rain than normal for the winter season. Some areas were quite dry, such as southern Miami-Dade County and portions of Collier, Hendry and Glades counties. In these areas, recorded rainfall was less than 50% of normal and resulted in top 10 driest winters on record at some locations (see table below for specific information). This dryness led to metro east coast, southern Everglades and southwest Gulf coast areas to be declared as “abnormally dry” in January, followed by far southern Everglades areas going into [moderate drought status](#) in February.

It wasn't dry everywhere, though. Portions of metro southeast Florida recorded from 8 to almost 10 inches of rain, resulting in near to slightly above normal rainfall. A lot of this rain fell in one day, on [February 28th](#) (last day of meteorological winter) when several areas received in excess of 4 inches of rain from a stalled frontal system.

The only other significant precipitation/severe weather event was the [Boca West tornado on February 5th](#) which was rated as an EF-1 on the Enhanced Fujita scale.

Following are December 2014-February 2015 rainfall totals, departure from normal in inches and ranking for selected locations:

Location (Beginning of Period of Record)	Dec 2014-Feb 2015 Rainfall (inches)	Departure from Normal	Rank
Big Cypress	5.62		
Brighton Reservation (Glades Co.)	3.63		
Cape Florida	5.56		

Fort Lauderdale/Hollywood Int'l (1912)	9.53	+0.48	24th wettest
Fort Lauderdale Dixie Water Plant	8.28		
Fort Lauderdale Beach	7.30		
Hialeah (1940)	3.36		
Hollywood (1963)	8.15	-0.90	
Homestead General Airport (1990)	2.98	-2.19	
Immokalee	2.81	-3.64	12th driest
Juno Beach	7.23		
LaBelle (1929)	2.47	-3.68	10th driest
Marco Island	0.97		
Miami Beach (1928)	4.63	-1.84	
Miami International Airport (1911)	5.08	-0.83	
Moore Haven (1918)	4.25	-1.29	
Muse	3.08		
North Miami Beach	8.97		
Naples East/Golden Gate	3.37		
Naples Municipal Airport (1942)	1.89	-3.51	10th driest
NWS Miami	4.04		
Oasis Ranger Station	2.81		
Opa-Locka Airport	8.01		
Ortona (1940)	2.39	-3.95	3rd driest
Palm Beach Gardens	6.13		
Palm Beach International Airport (1888)	4.86	-4.47	
Pembroke Pines – North Perry Airport	9.02		
Pompano Beach Airpark	4.60		
Tamiami Airport – West Kendall	3.25		
The Redland (1942)	2.34	-3.78	5th driest
South Bay (15S)	3.01		

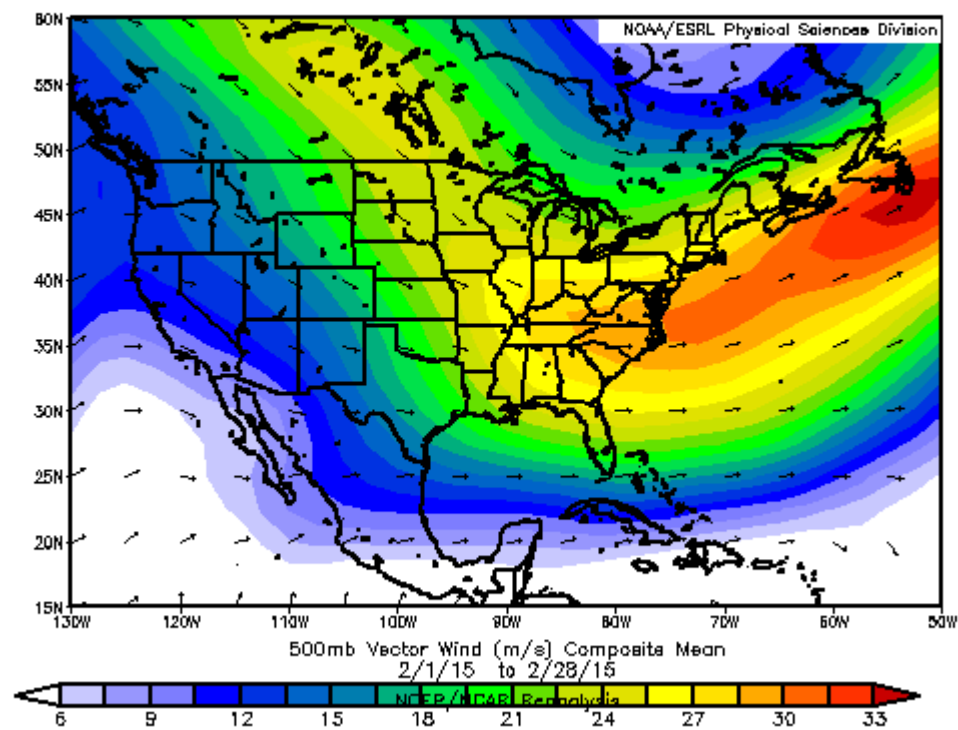
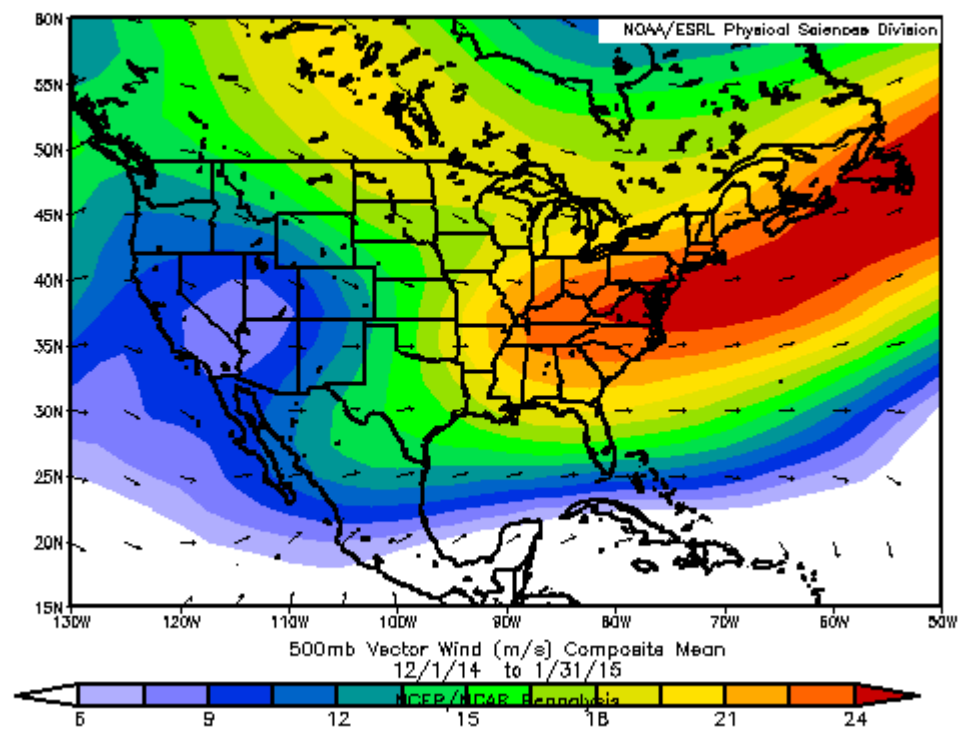
Outlook for March-May

[The outlook by the NOAA Climate Prediction Center](#) for the period from March through May calls for equal chances of either cooler, warmer or near-normal temperatures, along with an enhanced likelihood of wetter than normal conditions. Current indications are that much of the first half of March will continue on the warm side with mostly dry conditions mixed in with periods of rainfall as frontal systems approach the area.

Despite the outlook of wetter than normal conditions, March, April and May mark the peak of wildfire season as lingering dry grounds and warmer temperatures combine to increase the fire threat. All persons are urged to take measures to reduce the chance of wildfires. Visit the [Florida Forest Service web site](#) for more information on how to help prevent wildfires.

March and April typically bring an increase in easterly winds to the area along with an increase in beach-goers. This significantly increases the risk of rip currents along the east coast beaches. A sharp increase in drowning deaths and rescues caused by rip currents occurs during the spring months due in part to this shift in the wind patterns and more people in the water. All residents and visitors visiting area beaches are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. [Visit the National Weather Service Rip Current Awareness page](#) for more information.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at weather.gov/southflorida.



Figures 3 (top) and 4 (bottom): 500 mb (mid-tropospheric) mean winds for period December 2014 through January 2015 (top) and February 2015 (bottom). West to southwest winds in December and January kept much of the cold air over the central and northern U.S., while in February northwest winds over Florida were more predominant which enabled cold air masses to make it into the state.

Florida: Current 90-Day Departure from Normal Precipitation
Valid at 3/1/2015 1200 UTC– Created 3/3/15 14:10 UTC

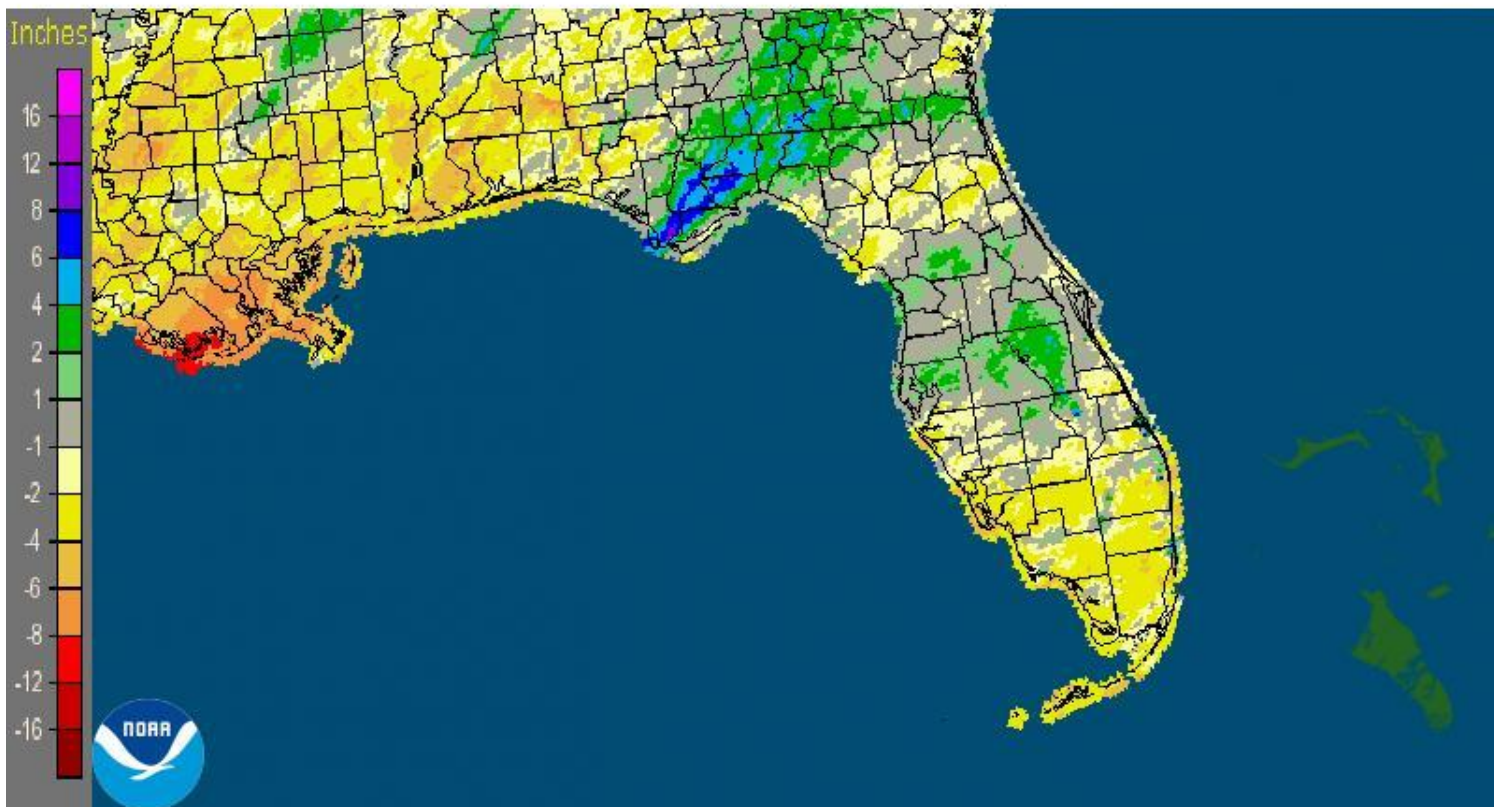


Figure 5: Rainfall departure from normal from December 2014 through February 2015. Most of the area was about 2 to 4 inches below normal for the time period.

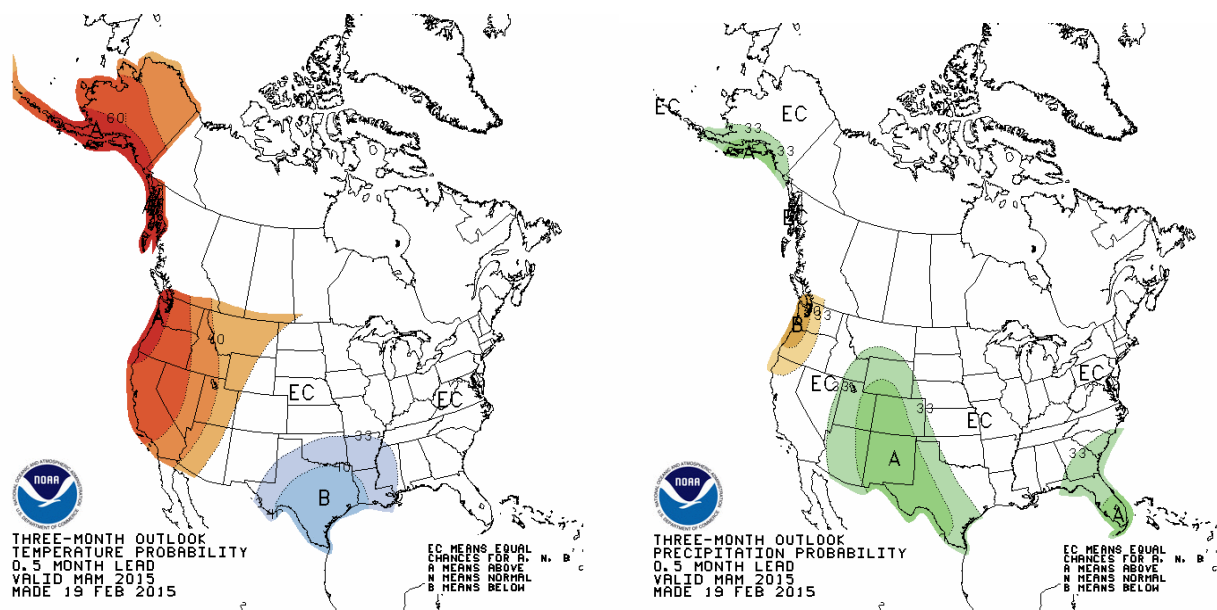


Figure 6: NOAA Climate Prediction Center outlook for March-May.